

WHAT IS CLAIMED IS:

1. A sheet-position detection device comprising:
at least one guide forming a sheet conveying path;
stop means for temporarily stopping a sheet conveyed along the sheet conveying path; and
sheet-position detection means for detecting a position of the sheet in a direction crossing a conveying direction of the sheet during the stoppage of the sheet.
2. A device according to Claim 1, wherein said stop means comprises a pair of rotating members for rotating in order to convey the sheet while grasping the sheet.
3. A device according to Claim 2, wherein said sheet-position detection means detects a position of an edge of the sheet parallel to the sheet conveying direction.
4. A device according to Claim 3, wherein said sheet-position detection means comprises a detection flag rotatable by contacting the edge of the sheet parallel to the sheet conveying direction, and a sensor for detecting rotation of said detection flag.
5. A device according to Claim 4, wherein said detection flag is attached to a moving block in the direction crossing the sheet conveying direction, and wherein the position of the sheet is calculated based on a

distance moved by said moving block until said detection flag covers said sensor.

6. An image forming apparatus comprising:

a sheet mounting unit for mounting sheets;

image forming means for forming an image on a sheet supplied from said sheet mounting unit, said image forming means adjustable in a direction transverse to a direction of conveying the sheet;

sheet-position detection means for detecting a position of the sheet in the direction transverse to the conveying direction of the sheet; and

image-formation control means for controlling a position of formation of the image in accordance with the sheet-position information from said sheet-position detection means.

7. A device according to Claim 6, wherein said sheet-position detection means detects a position of an edge of the sheet parallel to the sheet conveying direction.

8. A device according to Claim 7, wherein said sheet-position detection means comprises a detection flag rotatable by contacting the edge of the sheet parallel to the sheet conveying direction, and a sensor for detecting rotation of said detection flag.

9. A device according to Claim 8, wherein said detection flag is attached to a moving block in the direction crossing the sheet conveying direction, and wherein the position of the sheet is calculated based on a

distance moved by said moving block until said detection flag covers said sensor.

10. An image forming apparatus comprising:

a sheet mounting unit for mounting sheets;

image forming means for forming an image on a sheet supplied from said sheet mounting unit, said image forming means adjustable in a direction transverse to a conveying direction of the sheet;

skew correction means, positioned between said sheet mounting unit and said image forming means, for correcting skew of the sheet supplied from said sheet mounting unit by temporarily stopping the sheet;

sheet-position detection means for detecting a position of the temporarily stopped sheet in the direction transverse to the conveying direction of the sheet; and

image-formation control means for controlling a position of formation of the image in accordance with the sheet-position information from said sheet-position detection means.

11. A device according to Claim 10, wherein said sheet-position detection means detects a position of an edge of the sheet parallel to the sheet conveying direction.

12. A device according to Claim 11, wherein said sheet-position detection means comprises a detection flag rotatable by contacting the edge of the sheet parallel to the sheet conveying direction, and a sensor for detecting rotation of said detection flag.

13. A device according to Claim 12, wherein said detection flag is attached to a moving block in the direction crossing the sheet conveying direction, and wherein the position of the sheet is calculated based on a distance moved by said moving block until said detection flag covers said sensor.

14. An image forming apparatus comprising:

a sheet mounting unit for mounting sheets;

image forming means for forming an image on a sheet supplied from said sheet mounting unit, said image forming means adjustable in a direction transverse to a direction of conveying the sheet;

a reversal guiding channel for guiding the sheet by turning the sheet so as to form an image on a surface opposite to a surface where the image has been formed by said image forming means;

skew correction means, provided in said reversal guiding channel, for correcting skew of the sheet subjected to reversal guiding by temporarily stopping the sheet;

sheet-position detection means for detecting a position of the sheet in the direction transverse to the conveying direction of the sheet; and

image-formation control means for controlling a position of formation of the image in accordance with the sheet-position information from said sheet-position detection means,

wherein said sheet-position detection means is provided upstream of said skew correction means.

15. An apparatus according to Claim 14, wherein said reversal guiding channel comprises a conveying unit in which a reversal unit, mounted between an image forming portion and said sheet mounting unit, for turning a sheet having an image formed on a surface thereof, a reversal path for conveying the sheet turned by said reversal unit to said image forming portion, and a conveying path joining with said reversal path and for conveying a sheet accommodated in said sheet mounting means to said image forming portion are disposed in a vertical direction, and wherein said reversal path of said conveying unit is bent so as to be separated from said sheet mounting means, to cause said conveying path to join at a bent portion of said reversal path.

16. An apparatus according to Claim 15, further comprising detection means for detecting a sheet passing along said reversal path inside of the bent portion.

17. An apparatus according to Claim 14, wherein said sheet-position detection means detects a position of an edge of the sheet parallel to the sheet conveying direction.

18. An apparatus according to Claim 17, wherein said sheet-position detection means comprises a detection flag rotatable by contacting the edge of the sheet parallel to the sheet conveying direction, and a sensor for detecting rotation of said detection flag.

19. An apparatus according to Claim 18, wherein said detection flag is

attached to a moving block in the direction crossing the sheet conveying direction, and wherein the position of the sheet is calculated based on a distance moved by said moving block until said detection flag covers said sensor.

Figure 1 is a perspective view of a sheet conveying system. The system includes a sheet 10, a moving block 20, a detection flag 30, and a sensor 40. The sheet 10 is being conveyed in the direction of arrow A. The moving block 20 is attached to the sheet 10 and moves in the direction of arrow A. The detection flag 30 is attached to the moving block 20 and is positioned to detect the position of the sheet 10. The sensor 40 is positioned to detect the detection flag 30. The system is used to calculate the position of the sheet 10 based on the distance moved by the moving block 20 until the detection flag 30 covers the sensor 40.